

AIR POLLUTION CONTROL DISTRICT OF JEFFERSON COUNTY, KENTUCKY TITLE V OPERATING PERMIT

Permit No.: 148-97-TV(R1) Co/Plant ID: 0015

Effective Date: 28 September 2001 Expiration Date: 28 September 2006

UTM Northing: 4231.8 UTM Easting: 607.1

SIC: 3497 NAICS: 332999 AFS: 00015

Permission is hereby given by the Air Pollution Control District of Jefferson County to operate

equipment located at:

Reynolds Metals Company Louisville Laminating Plant 1225 W. Burnett Ave. Louisville, KY 40210

in accordance with the permit application on file with the District and under the conditions in the permit. This permit and the authorization to operate the emission units listed shall expire on midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Applicant for Permit: Aaron R. Wall	
Title of Applicant: Plant Manager	
Date Application Received: 21 April 1997	
Date Application Administratively Complet	te: 17 June 1997
Date Public Notice Given: 10 December 20	00
Reviewing Engineer (03)	Air Pollution Control Officer

Permit No. 148-97-TV(R1)	Plant ID 0015
Title V Permit Revisions/Changes	
Abbreviations and Acronyms	
Preamble	6
General Conditions	
Emission Unit U-1 Description: Laminator #12	14
Applicable Regulations:	
Allowable Emissions:	
Components:	
Control Devices:	
Additional Conditions	
Comments/Explanations	
Emission Unit U-2 Description: 7 Laminators & 2 Coaters	28
Applicable Regulations:	
Allowable Emissions:	
Components:	29
Control Devices:	
Additional Conditions	
Comments/Explanations	
Emission Unit U-3 Description: 4 Indoor Aboveground Storage Tanks	1/
Applicable Regulations:	
Allowable Emissions:	
Components:	
Control Devices:	
Additional Conditions	
Comments/Explanations	48
Emission Unit U-4 Description: 2 Heating Boilers	49
Applicable Regulations:	
Allowable Emissions:	
Components:	
Control Devices:	
Additional Conditions	
Comment/Explanation	
Comment/Explanation	
Emission Unit U-5 Description: 1 Cold Solvent Parts Cleaner with a secondary r	reservoir 53
Applicable Regulations:	
Allowable Emissions:	
Components:	
Control Devices:	
Additional Conditions	

Permit No. 148-97-TV(R1)	Plant ID 0015
Permit Shield	57
Alternative Operating Scenarios	57
Off-Permit Documents	57
Source-Wide HAP Speciation	57
Insignificant Activities	57

Title V Permit Revisions/Changes

Revision No.	Revision/ Change Date	Public Notice Date	Туре	Emission Unit/Page No.	Description
NA	09/28/2001	12/10/02	Initial	Entire Permit	Initial Permit Issuance
Rev. 1	11/05/2002	N/A	Administrative	U-2/35	Administrative change to correct a typo in Additional Condition 2ai. See permit summary for more detail.

Abbreviations and Acronyms

AC- Additional Condition

AFS- AIRS Facility Subsystem

AIRS- Aerometric Information Retrieval System

APCD- Air Pollution Control District

ASL- Adjusted Significant Level

atm- Atmosphere

BACT- Best Available Control Technology

Btu- British Thermal Unit

°C- Degrees Centigrade

CEMS- Continuous Emission Monitoring System

CAAA- Clean Air Act Amendments (15 November 1990)

cf- Cubic foot

DOE- District Only Enforceable

°F- Degrees Fahrenheit

gal- Gallon

HAP- Hazardous Air Pollutant

Hg- Mercury

hr- hour

lbs- Pounds

1- Liter

MACT- Maximum Achievable Control Technology

m- Meter

mg- Milligram

mm- Millimeter

MM- Million

MOCS- Management of Change System

NAICS- North American Industry Classification System

NSR- New Source Review

NO_x- Nitrogen oxides

NSPS- New Source Performance Standards

PM- Particulate Matter

PM₁₀- Particulate matter less than 10 microns

ppm- Parts per million

PSD- Prevention of Significant Deterioration

PMP- Preventive Maintenance Plan

psia- Pounds per square inch absolute

RACT- Reasonably Available Control Technology

SIC- Standard Industrial Classification

SIP- State Implementation Plan

SO₂- Sulfur dioxide

TAL- Threshold Ambient Limit

TAP- Toxic Air Pollutant

tpy- Tons per year

VOC- Volatile Organic Compound

UTM- Universal Transverse Mercator

Preamble

Title V of the Clean Air Act Amendments of 1990 required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Air Pollution Control District (APCDJC) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations".

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit general conditions define requirements which are generally applicable to all Title V companies under the jurisdiction of APCDJC. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the general conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The general conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The source's Title V permit may include a list of "insignificant activities," which are activities or processes falling into the general categories defined in Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Activities so identified may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply and must be included in the Title V operating permit. No periodic monitoring shall be required for facilities designated as insignificant activities.

General Conditions

- 1. <u>Compliance</u> The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. (Regulation 2.16, sections 4.1.3, 4.1.13.1 and 4.1.13.7)
- 2. <u>Compliance Certification</u> The owner or operator shall certify, annually or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification directly to the following address as well as to the District, as set forth in Regulation 2.16, section 4.3.5.4:

US EPA - Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-8960

- 3. <u>Compliance Schedule</u> A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:
 - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
 - b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.
- 4. **Duty to Supplement or Correct Application** If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, it shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

5. **Emergency Provision**

- a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - I. An emergency occurred and that the owner or operator can identify the cause of the emergency.
 - ii. The permitted facility was at the time being properly operated.
 - During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.
 - iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- c. This condition is in addition to any emergency or upset provision contained in an applicable requirement.

(Regulation 2.16, sections 4.7.1 through 4.7.4)

- 6. <u>Emission Fees Payment Requirements</u> The owner or operator shall pay annual emission fees in accordance with Regulation 2.08. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. (Regulation 2.08, section 1.3)
- 7. **Emission Offset Requirements** The owner or operator shall comply with the requirements of Regulation 2.04.
- 8. <u>Enforceability Requirements</u> Except for the conditions that are specifically designated as "District Only Enforceable Conditions", all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. (Regulation 2.16, sections 4.2.1 and 4.2.2)

9. **Enforcement Action Defense**

- a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation.

(Regulation 2.16, sections 4.1.13.2 and 4.1.13.3)

- 10. <u>Hazardous Air Pollutants and Sources Categories</u> The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.
- 11. <u>Information Requests</u> The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. (Regulation 2.16, section 4.1.13.6) If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA. (Regulation 2.07, section 10.2)
- 12. <u>Insignificant Activities</u> The owner or operator shall notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. (Regulation 2.16, section 5)
- 13. <u>Inspection and Entry</u> Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:
 - a. Enter the premises to inspect any emissions-related activity or records required in this permit.
 - b. Have access to and copy records required by this permit.
 - c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.
 - d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements.

(Regulation 2.16, section 4.3.2)

- 14. Monitoring and Related Record keeping and Reporting Requirements The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be January 1st through June 30th and July 1st through December 31st of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes.
- 15. **Off-permit Documents** Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, Section 5. (Regulation 2.16, section 4.1.5)
- 16. **Operational Flexibility** The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
- 17. **Permit Amendments (Administrative)** This permit can be administratively amended by the District in accordance with Regulation 2.16, sections 2.3 and 5.4.
- 18. **Permit Application Submittal** The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.
- 19. **Permit Duration** This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
- 20. <u>Permit Renewal, Expiration and Application</u> Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.
- 21. <u>Permit Revisions</u> No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. (Regulation 2.16, section 4.1.16)
- 22. **Permit Revision Procedures (Minor)** Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.
- 23. **Permit Revision Procedures (Significant)** A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.

- 24. **Permit Revocation and Termination by the District** The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1.1 through 5.11.1.5. For purposes of Section 5, substantial or unresolved noncompliance includes, but is not limited to:
 - a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment.
 - b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District.
 - c. Knowingly making any false statement in any permit application.
 - d. Noncompliance with Regulation 1.07, section 4.2; or
 - e. Noncompliance with KRS Chapter 77.
- 25. **Permit Shield** The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
- 26. **Prevention of Significant Deterioration of Air Quality** The owner or operator shall comply with the requirements of Regulation 2.05.
- 27. **Property Rights** This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.
- 28. <u>Public Participation</u> Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, Section 1; and 2.16, sections 5.1.1.2 and 5.5.4.
- 29. **Reopening For Cause** This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.
- 30. **Reopening for Cause by EPA** This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.
- 31. Risk Management Plan (112(r)) For each process subject to Section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
- 32. <u>Severability Clause</u> The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to

- other circumstances, as well as the remainder of this permit's conditions, shall not be affected. (Regulation 2.16, section 4.1.12)
- 33. <u>Stack Height Considerations</u> The owner or operator shall comply with the requirements of Regulation 2.10.
- 34. <u>Startups, Shutdowns, and Malfunctions Requirements</u> The owner or operator shall comply with the requirements of Regulation 1.07.

35. Submittal of Reports, Data, Notifications, and Applications

a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.11.7 shall be submitted to:

Air Pollution Control District of Jefferson County 850 Barret Ave Louisville, KY 40204-1745

b. Documents which are specifically required to be submitted to EPA as set forth in Regulation 2.16 sections 3.3, and 5.8.5 shall be mailed to EPA at the following address:

US EPA - Region IV APTMD - 12th floor Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-3104

36. <u>Other Applicable Regulations</u> - The owner or operator shall comply with all applicable requirements of the following regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	
1.01	General Application of Regulations and Standards	
1.02	Definitions	
1.03	Abbreviations and Acronyms	
1.04	Performance Tests	
1.05	Compliance with Emission Standards and Maintenance Requirements	
1.06	Source Self-Monitoring and Reporting	
1.07	Emissions During Startups, Shutdowns, Malfunctions, and Emergencies	
1.08	Administrative Procedures	

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	
1.09	Prohibition of Air Pollution	
1.10	Circumvention	
1.11	Control of Open Burning	
1.14	Control of Fugitive Particulate Emissions	
2.01	General Application	
2.02	Air Pollution Regulation Requirements and Exemptions	
2.03	Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/Renovation Permits	
2.07	Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use of Emission Reduction Credits	
2.09	Causes for Permit Suspension	
2.10	Stack Height Considerations	
2.11	Air Quality Model Usage	
2.16	Title V Operating Permits	
4.01	General Provisions for Emergency Episodes	
4.02	Episode Criteria	
4.03	General Abatement Requirements	
4.07	Episode Reporting Requirements	
5.01	General Provisions (for Hazardous Air Pollutants)	
5.03	Potential Hazardous Emissions	
6.01	General Provisions (for Existing Affected Facilities)	
6.02	Emission Monitoring for Existing Sources	
7.01	General Provisions (for New Affected Facilities)	

DISTRICT ONLY ENFORCEABLE REGULATIONS			
Regulation Title			
1.12	Control of Nuisances		
1.13	Control of Objectionable Odors in the Ambient Air		
2.08	Emissions Fees, Permit Fees, Permit Renewal Procedures, and Additional Program Fees		
8.03	Commuter Vehicle Testing Requirements		

Emission Unit U-1 Description: Laminator #12

Emission Unit No.	Emission Unit Description	
U-1	Laminator #12, equipped with a rotogravure printing (or coating) station, a glue station, and a drying oven. The rotogravure station has the ability to apply water-based and solvent-based inks and coatings.	

Applicable Regulations:

Federally Enforceable Regulations			
Regulation	Title	Applicable Sections	
6.29	Standard of Performance for Existing Graphic Arts Facilities Using Rotogravure and Flexography	1, 2, 3.2, 4.1, 4.2, 4.3, 4.4, 5, 6, 7.1, 7.2, 7.4, 7.4.1, and 7.4.4	
40 CFR 63, Subpart KK	National Emission Standards for the Printing and Publishing Industry	See Condition #1.b.	
40 CFR 63, Subpart A	General Provisions	See Condition #1.b.	
6.09	Standards of Performance for Existing Process Operations	1, 2, 3.1, and 3.3	
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 2, 3, 4, and 5	

District Only Enforceable Regulations			
Regulation	Title	Applicable Sections	
5.02	Federal Emission Standards for Hazardous Air Pollutants Incorporated by Reference	2.1, 2.31, 3, 4, and 5	
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1, 2, 3, 5, and 6	
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, and 5	

Allowable Emissions:

Emission Pt.	Regulated Air Pollutant	Applicable Regulation	Standard/ Limit
E-1	VOC	6.29	See Additional Condition #1.a.
	HAPs	40 CFR 63, Subpart KK 40 CFR 63, Subpart A	See Additional Condition #1.b.
	TAPs	5.11 & 5.12	See Additional Condition #1.c.
	Opacity	6.09	20% opacity See Additional Condition #1.d.

Components:

Emission Pt.	on Process Primary Fuel		Secondary Fuel
E-1	Laminator #12	Natural Gas	No. 2 Fuel Oil

The following activities associated with Emission Unit No. U-1 are activities that have negligible emissions:

Description		
Electric Batch "Cookers" for coatings	2	
Lacquer Mixing Room - 3 Submerged-fill Arms for filling drums with solvent; 1 Mixer; 2 Floor Vents; & 1 Ceiling Hood	1	

Note: The activities listed above are also associated with Emission Unit No. U-2.

Control Devices:

Emission	Control	Control	Primary	Secondary
Pt.	Id.	Equipment	Fuel	Fuel
E-1	C-1	Thermal Oxidizer	Natural Gas	No. 2 Fuel Oil

Additional Conditions

1. **Standards** (Regulation 2.16, section 4.1.1)

a. VOC

- i. The owner or operator shall operate this laminator in accordance with the requirements specified in Regulation 6.29. Section 3.2 of the regulation specifies that no more than 35% by weight of the VOCs net input into the process shall be emitted when nonexempt coatings and inks are being applied. Section 5 of the regulation specifies which coatings and inks are exempt from the control requirements in Section 3 of the regulation. (See Comment #1) (Regulation 6.29, Sections 3 and 5)
- ii. Cleanup solvents may not be used while the thermal oxidizer is not in operation unless the owner or operator can demonstrate that the emission reduction required by section 3.2 of Regulation 6.29 will be maintained. The owner or operator must also consider any other requirements which may apply. (Regulation 6.29, section 3.2)
- iii. Although there are no production limits on Laminator #12, the owner or operator shall obtain the approval of the District prior to modifying or reconstructing the affected facility. (Regulation 2.03, section 1.1)
- b. **HAPs** (40 CFR Part 63, Subpart KK and Subpart A)

The owner or operator shall comply with the requirements of 40 CFR Part 63, Subpart KK, National Emission Standards for the Printing and Publishing Industry. The following sections of Subpart KK are applicable to the equipment in this Emission Unit: §63.820; §63.821 (a)(2)&(3), (b), & (c); §63.822; §63.823; §63.825; §63.826; §63.827 (a), (b)(2), (c)(2)&(3), (d), (e), & (f); §63.828; §63.829; §63.830; §63.831; and Appendix A. Table 1 to Subpart KK specifies those requirements of 40 CFR Part 63, Subpart A, General Provisions which are applicable to Subpart KK facilities. The Subpart KK emission standards, which apply to the equipment in this Emission Unit, are summarized below:

Emission Standards (40 CFR 63.825) - Emissions are limited to no more than five percent of the organic HAP applied for the month; or to no more than four percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month; or to no more than 20 percent of the mass of solids applied for the month; or to a calculated equivalent allowable mass based on the organic HAP and solids contents of the inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month. (The requirements which relate to control equipment shall apply if and when the thermal oxidizer is used to achieve compliance with Subpart KK.) (See Comment #2)

- c. TAPs (Regulations 5.11 and 5.12)
 - i. The owner or operator shall comply with Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants and Regulation 5.12, Standards of Performance for New or Modified Sources

Emitting Toxic Air Pollutants by maintaining monthly records to demonstrate that the modeling input parameters have not changed such that compliance with the Threshold Ambient Limits (TALs) would be invalidated.

ii. The owner or operator shall comply with the following source-wide TAP emission limits until additional modeling is performed. After additional modeling, the owner or operator shall comply with those TAP emission limits approved by the District.

Source-wide TAP Emissions Limits			
TAP	Regulation	Allowable Emissions (lbs/hr)	
Ammonia	5.11/5.12	19.03	
Ethyl acetate	5.12	658.89	
Isobutyl alcohol	5.12	44.74*	
Isopropyl acetate	5.12	403.39	
Methyl propyl ketone	5.12	562.72	
n-Butyl acetate	5.12	305.81*	
n-Propyl acetate	5.12	647.48	
Propyl alcohol	5.12	153.07*	

- * After modeling was performed in September 1998, the stacks on Laminators #9 and #14 were re-configured. This will result in larger allowable emission rates for these pollutants. Additional modeling has not yet been performed to quantify these larger allowable emission rates.
- iii. The owner or operator shall continue to comply with Regulations 5.11 and 5.12, except for those specific pollutants governed by a MACT standard that is or becomes applicable to this source.
- iv. The owner or operator shall not be precluded from requesting that Additional Conditions #1.c.i. and #1.c.ii. above be replaced with another District-approved method of compliance demonstration more suitable to their particular facility and mode of operation.

d. **Opacity**

The owner or operator shall not discharge into the atmosphere from any process operation, or from any air pollution control equipment installed on any process operation, any gases that may contain particulate matter that is equal to or greater than 20 percent opacity. (Regulation 6.09, sections 3.1 and 3.3)

2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

a. VOC

i. The owner or operator shall supply such information, as required by the District, to demonstrate compliance on a daily basis. Even though Laminator #12 is not included in the SIP Revision Application (Federal Register, May 16, 1990 and January 13, 1998, 40 CFR Part 52, Subpart S, 52.920) described in Emission Unit U-2, the company shall continue using the SIP Revision Application compliance reporting system for Laminator #12, except as specified otherwise in this permit or unless changes to the system are approved or requested by the District. For each rotogravure product produced, accurate records shall be maintained of 1) the date, 2) the machine number, 3) the yards run, 4) the output width, 5) the output laydown rate (pounds of coatings used for specified area), and 6) the coating used. The company shall verify the accuracy of the laydown rates as described in Additional Condition 2.a.ii. The actual measured laydown value for each product run (Each product run has a work order and consists of one or more rolls of an identical product.) shall be used in determining the actual emissions for each day. If requested by the District, the laydown value shall be tested more frequently. (In the limited cases where the amount of solids applied to the base material is too low to allow an accurate measurement, the lavdown value shall be determined from empirical data.) The "TABLE VOC" (pounds of VOC per gallons of coating/ink used) and "TABLE SLD" (pounds of solids per gallons of coating/ink used) shall be determined by using the methods as specified in Additional Condition 2.a.iii. The following terms are used in the compliance reporting system for Machine #12. "GAL OF COAT" equals gallons of coating/ink used. "BEFORE LBS VOC" equals pounds of VOC prior to the application of any control measures: - for waterborne coatings/inks, the value is based on a theoretical 25% VOC coating/ink. Note: The theoretical 25% VOC content of a water-borne coating/ink is calculated by substituting isopropyl alcohol (a representative solvent) for water in the mixture to produce a 25% by volume solvent content on a solids free basis.]; - for organic solvent-based coatings/inks, the value is based on the TABLE VOC x GAL OF COAT. "AFTER LBS VOC" equals pounds of VOC after the application of any control measures: - for organic solvent coatings/inks run on Laminator #12 when the thermal oxidizer is in proper service, the value is 35% of the BEFORE LBS VOC (i.e. 65% overall control efficiency. Note: If approved by the District, the owner or operator may use a higher control efficiency if the new efficiency is properly demonstrated.); - for water-borne (or other exempt) coatings/inks run on Laminator #12 when the thermal oxidizer is in proper service, the value is 35% of the actual pounds of VOCs which would be emitted from the water-borne (or other exempt) mixture without the use of a control device; for organic solvent coatings/inks run on Laminator #12 when the thermal oxidizer is out of service, the value equals the BEFORE LBS VOC: - for water-borne (or other exempt) coatings/inks run on Laminator #12 when the thermal oxidizer is out of service, the value equals the actual pounds of VOCs emitted from the water-borne (or other exempt) mixture without the use of the control device. Records shall be maintained of the daily emissions (a total of the first, second, and third shifts) from Laminator #12. (Regulation 1.05, Section 4)

ii. The owner or operator shall verify the accuracy of the laydown rates as shown below or as required by the District. (This may include comparing the computer generated emissions to emissions calculated from actual ink and solvent usages over either short or long term periods.)

1. SCOPE:

- 1.1 Reynolds Metals Company expresses laydown in weight per unit area of product (ream weight). [1 ream = 3000 ft^2]
- 1.2 The weight per unit area is expressed as lbs. per ream.

2. APPARATUS:

- 2.1 Balance, readable and accurate to 0.0001 g is essential to obtain accuracy.
- 2.2 Cutter, a template is used for preparing specimen sheets. The sample should be cut to exact size with a sharp knife on a smooth surface to insure accuracy in cutting.
- 2.3 Scale, such as a finely graduated steel rule reading in 0.5 mm, capable of measuring the dimensions of the specimen to an accuracy of 0.2%.

3. CALIBRATION:

3.1 Be sure that the sheet-weighing device has been properly calibrated to the required accuracy. Before each use, see that appreciable frictional effects are absent and that the zero reading is correct.

4. TEST SPECIMEN:

- 4.1 Obtain the sample to be tested. From each lot of stock to be tested, a representative sheet should be chosen.
- 4.2 Testing is limited to coatings that show weighable difference from coating removal.

5. PROCEDURE:

- 5.1 Cut sample using template and cutting methods to assure that each specimen is within 0.3%, i.e., measure the dimensions of each sheet to within 0.2%. Determine the total weight of each specimen to the fourth decimal place.
- 5.2 Carefully remove the coating using appropriate solvent without tearing foil or scratching and scouring surface (i.e., use light pressure and cotton ball or wash with a squirt bottle). Thoroughly dry sample and inspect to assure coating has been totally removed. Reweigh sample and record weight to the fourth decimal place.

6. CALCULATIONS:

6.1 Subtract cleaned sample weight from original weight. Sizing of template allows direct conversion from decimal grams by multiplying by a factor of 100 (i.e., display shows 0.3542 g, this results in 35.42 lbs. per ream) to arrive at total coating weight.

7. **REPORT:**

7.1 For coatings, express the weight per unit area in lbs. per ream to two significant figures.

8. ADDITIONAL INFORMATION:

- 8.1 Template is sized to yield direct conversion from decimal gram scale to lbs. per ream. Template size is 3.0861 square inches. (Regulation 1.05, Section 4)
- iii. The company shall use the following program to certify the accuracy of the coating data for Laminator #12:
 - The VOC, water, and solids content of the coatings, or the components thereof, shall be determined by using EPA Method 24. The District approves that Certified Product Data Sheets (CPDSs) and the corresponding testing that was performed by the vendor be used, instead of the owner or operator or vendor independently performing the testing, if Method 24 was followed to determine the VOC, water, and solids content of the coating or coating component. The owner or operator shall obtain from the coating supplier the most recent CPDSs or a confirmation from the coating supplier that the owner or operator is using the most recent CPDSs.
 - 2) Any new production coating/ink or coating/ink component shall be tested or a CPDS shall be obtained prior to usage. (Regulation 1.05, Section 4)
- iv. In addition to the monitoring requirements specified in Additional Conditions #2.a.i., #2.a.ii., and #2.a.iii. above, the company is also required to comply with the applicable record keeping requirements specified in Regulation 6.29, Standard of Performance for Existing Graphic Arts Facilities Using Rotogravure and Flexography. These requirements are summarized below:
 - An owner or operator of a stationary source using adhesives, coatings, solvents, and/or graphic arts materials and subject to this regulation shall maintain daily records of operations for the most recent two year period. (Note: This Title V Permit requires that records be maintained for the most recent five year period.) The records shall be made available to the District, the Cabinet, or EPA upon request. The records shall include, but not be limited to, the following:

- a) The rule number applicable to the operation for which the records are being maintained,
- b) The application method and substrate type (metal, plastic, paper, etc.),
- c) The amount and type of adhesive (including water-based adhesives), coatings (including catalyst and reducer for multicomponent coatings), solvent, and/or graphic arts materials used at each point of application, including exempt compounds,
- d) The VOC content as applied in each adhesive, coating, solvent, and/or graphic arts material, and
- e) The date for each application of adhesive, coating, solvent, and/or graphic arts material.
- 2) VOC content shall be calculated using a percent solids basis, less water and exempt solids, for adhesives, coatings, and inks; using EPA Method 24. (Certified Product Data Sheet information may be used if Method 24 was followed to determine the VOC, water, and solids content of the material.)
- When a source utilizes add-on controls to achieve compliance, documentation will be necessary to assure proper operation. Examples of related information are:
 - a) Thermal oxidation combustion temperature, inlet and outlet VOC concentration from emission tests, how and when these concentrations were determined, destruction or removal efficiency, and manufacturer data,
 - b) When a source utilizes add-on controls, compliance shall be determined by using EPA Method 25.

(Regulation 6.29, Section 7)

- v. As specified in Regulation 1.04, Performance Tests; Regulation 1.05, Compliance with Emission Standards and Maintenance Requirements, Sections 1 and 3; Regulation 6.01, General Provisions, Section 4; and Regulation 6.29, Standard of Performance for Existing Graphic Arts Facilities Using Rotogravure and Flexography, Sections 4 and 7, the company shall perform any additional compliance testing as required by the District. As requested by the District, EPA Test Methods 1, 2, 3, 4, 24, 24A, 25, and 25A as specified in the Code of Federal Regulations (CFR) Title 40, Part 60, Appendix A, and Procedures F.1, L, and T as specified in the EPA "Guidelines for Developing Capture Efficiency Protocols" shall be used in order to determine the efficiency of control devices. Test methods other than those specified in this condition or in Additional Condition #2.a.iv. may be used as approved by the District.
- vi. The owner or operator shall keep track of the "additional solvent usage" for Laminator #12. Records for "additional solvent usage" will include the date, solvent identification, and quantity used for make up, clean up, incidental spillage, and leakage. Records shall also be kept of the identification and quantity of each adhesive used. The records above shall be kept on forms approved by the District.

- vii. The owner or operator shall notify the District prior to using solvent-based adhesives. (See Comment #3) (Regulation 6.29, Section 7)
- viii. The owner or operator shall maintain a minimum temperature in the combustion chamber of the thermal oxidizer when inks and coatings, which are not exempt according to Section 5 of Regulation 6.29, are being used on Laminator #12. Any three-hour period during which the average combustion chamber temperature is more than 50°F below the average combustion chamber temperature during the most recent performance test when compliance was demonstrated shall be classified as a period of excess emissions for reporting purposes. (Until another performance test is conducted and approved, a test temperature of 1400°F shall be used, unless a different value is reviewed and approved by the District.) (Regulation 1.05, Section 5)
- ix. The owner or operator shall continuously monitor and record the combustion chamber temperature when the thermal oxidizer is operated. This shall be done by means of a chart recorder or an equivalent device approved by the District. In the event of a chart recorder malfunction, the company shall repair the chart recorder expeditiously and shall record the temperature on a log once per shift until the recorder is repaired. (Regulation 1.05, Section 5)
- x. The owner or operator shall maintain a log showing the following periods (dates and times): when the thermal oxidizer is in service and inks and coatings not exempt from Section 3 of Regulation 6.29 are being used; when the thermal oxidizer is in service and inks and coatings exempt from Section 3 of Regulation 6.29 are being used; and when the thermal oxidizer is not in service and inks and coatings not exempt from Section 3 of Regulation 6.29 are being used; and when the thermal oxidizer is not in service and inks and coatings exempt from Section 3 of Regulation 6.29 are being used. (Regulation 1.05, Section 5)

b. **HAPs** (40 CFR Part 63, Subpart KK and Subpart A)

The 40 CFR Part 63, Subpart KK, National Emission Standards for the Printing and Publishing Industry, monitoring requirements, which apply to the equipment in this Emission Unit, are summarized below:

i. Compliance Demonstration (40 CFR 63.825, 63.826, and 63.827) - Compliance with the regulation is required on and after May 30, 1999 (beginning with the monthly calculation for June 1999). The company shall demonstrate that the inks, coatings, varnishes, adhesives, primers, solvents, diluents, reducers, thinners, and other materials applied each month are in compliance with the emission standards specified in 40 CFR 63.825.

If the company changes its initial decision and uses the thermal oxidizer on Laminator #12 to comply with the regulation, the company must conduct an

initial performance test of the capture efficiency and continuously monitor a site specific operating parameter to assure the capture efficiency. In addition, the company must either: a) demonstrate initial compliance through a performance test of the control device efficiency and demonstrate continuing compliance through continuous monitoring of control device operating parameters; or b) use continuous emission monitors for determining the inlet and outlet total organic volatile matter concentrations to demonstrate the control device efficiency. The overall organic HAP control efficiency is determined from a combination of the capture efficiency and the control device efficiency. The company must calculate the organic HAP emissions each month and demonstrate that they are in compliance with the emission standards above.

Procedures are specified in the regulation for determining the organic HAP content, the volatile matter content, and the solids content of the materials applied, for conducting performance tests, and for performing calculations to demonstrate compliance with the emission standards.

ii. Monitoring Requirements (40 CFR 63.828) - The regulation has various requirements to ensure that the monitoring equipment is properly operated and maintained. This includes requirements for continuous emission monitors, temperature monitors, and the operating parameters which are monitored to ensure that the capture efficiency measured during the initial compliance test is maintained. (The requirements which relate to control equipment shall apply if and when the thermal oxidizer is used to achieve compliance with Subpart KK.) (See Comment #2)

c. **TAPs** (Regulations 5.11 and 5.12)

The owner or operator shall demonstrate compliance with Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants and Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants, by complying with Additional Conditions #2.c.i. through #2.c.iv., below. These conditions are surrogates for hourly emissions records and will monitor ongoing compliance.

- i. The owner or operator shall maintain monthly records to demonstrate that the modeling input parameters have not changed such that compliance with the Threshold Ambient Limits (TALs) would be invalidated; and make these records available to the District upon request.
- ii. The owner or operator shall monitor and maintain records of the operational parameters(s) being used to assure proper operation of each control device and continued compliance with all applicable emission standards or limits. The specific indicators of control device performance are specified elsewhere in this permit.
- iii. The owner or operator shall continue to comply with District Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants and District Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants, except for those specific pollutants governed by a MACT standard that is, or becomes, applicable to this source or pollutant.

iv. The owner or operator shall not be precluded from requesting that Additional Conditions #2.c.i. and #2.c.ii. be replaced with another District-approved method of compliance demonstration more suitable to their particular facility and mode of operation.

d. Opacity

To demonstrate compliance with the opacity standard specified in Regulation 6.09, sections 3.1 and 3.3, the procedures below shall be followed when fuel oil is burned in Laminator #12 Oven (Stack No. S1) or in Laminator #12 Thermal Oxidizer (Stack No. S1):

- i. To demonstrate compliance with the opacity standard, the owner or operator shall conduct a daily one-minute visible emissions survey, during normal operation and daylight hours, of Stack S-1. No more than four Emission Points shall be observed simultaneously.
- ii. For Emission Points without observed visible emissions during fourteen consecutive operating days (when readings are required), the owner or operator may elect to conduct a weekly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in Additional Condition #2.d.i.
- iv. If Laminator #12 is not operated or if no. 2 fuel oil is not burned in the emission point during a given day (or week, as appropriate), then no visible emission survey needs to be performed.

3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. VOC

The owner or operator shall keep records, as needed, to comply with the requirements specified in Additional Conditions #2.a. and #4.a. This includes keeping records as follows: for documenting production data for each rotogravure product produced during the day, VOC emissions before control, and VOC emissions after control; for verifying the accuracy of the laydown rates; for certifying the accuracy of the coating data; for keeping the records required by Regulation 6.29; for determining makeup and cleanup solvent usage; for documenting adhesive usage; for documenting the combustion chamber temperature in the afterburner; and for describing periods when there were combustion chamber low temperature readings and other malfunctions and bypasses.

b. **HAPs** (40 CFR Part 63, Subpart KK and Subpart A)

The 40 CFR Part 63, Subpart KK, National Emission Standards for the Printing and Publishing Industry, record keeping requirements, which apply to the equipment in this Emission Unit, are summarized below:

Record keeping (40 CFR 63.829) - The company shall keep records on a monthly basis of the following: Material usage, HAP usage, volatile matter usage, and solids usage that support data that the source is required to report. The following additional records shall be required if the thermal oxidizer is used for achieving compliance with the HAP regulation: Various startup, shutdown, and malfunction information for process equipment and air pollution control equipment; maintenance performed on the air pollution control equipment; various information on continuous monitoring system (CMS) performance, maintenance, calibration, quality control, malfunctions, and corrective action taken; performance test information; all required measurements needed to demonstrate compliance with the emission standards such as continuous emission monitor data, control device and capture system operating parameter data; liquid-liquid material balances if a solvent recovery device is used; all required CMS measurements; each period of excess emissions and parameter monitoring exceedances; the total process operating time during the reporting period; and other miscellaneous data.

If the company qualifies for various exemptions from the regulation, the records required by the regulation shall be maintained. The requirements which relate to control equipment shall apply if and when the thermal oxidizer is used to achieve compliance with Subpart KK. (See Comment #2)

c. **TAPs** (Regulations 5.11 and 5.12)

See Additional Condition #2.c.

d. Opacity

To demonstrate compliance with the opacity standard specified in Regulation 6.09, sections 3.1 and 3.3, the procedures below shall be followed when fuel oil is burned in Laminator #12 Oven (Stack No. S1) or in Laminator #12 Thermal Oxidizer (Stack No. S1): Records of the results of all visible emission surveys and tests performed shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; and whether visible emissions were observed. If Laminator #12 is not operated or if no. 2 fuel oil is not burned in the emission point during a given day (or week, as appropriate), then no visible emission survey needs to be performed and a negative declaration may be entered in the record. Records shall be kept of any corrective action taken pursuant to Additional Condition 2.d.iii.

4. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. VOC

The owner or operator shall include, at a minimum, the following information for Laminator #12 and the thermal oxidizer in the semi-annual compliance monitoring

reports. (If the owner or operator prefers, this information may be submitted each calendar month along with the VOC compliance report which is required for the laminators/coaters covered by Emission Unit U-2):

- i. Emission Point ID number;
- ii. The beginning and ending date of the reporting period;
- iii. Daily production data, emissions before control, and emissions after control, as specified in Additional Condition #2.a.i;
- iv. Identification of the time periods (and durations) that Laminator #12 and the thermal oxidizer were operated while the combustion chamber temperature was not being maintained at the required temperature, with a listing of the average temperature values during these periods. Any other time periods during which the thermal oxidizer malfunctioned or was bypassed (when inks and coatings, which are not exempt according to Section 5 of District Regulation 6.29 were being used on Laminator #12) shall also be reported. (If no combustion chamber temperature readings were below 1400 degrees Fahrenheit and if no other malfunctions or bypasses occurred during the reporting period, this should be reported.); and
- v. A description of the probable cause of the low temperature readings and the other malfunctions and bypasses and a description of the corrective actions or preventive measures taken. (This reporting is in addition to any reporting required by District Regulation 1.07, Emissions During Shutdowns, Malfunctions, Startups, and Emergencies.) (See Comment #4)

b. **HAPs** (40 CFR Part 63, Subpart KK and Subpart A)

The 40 CFR Part 63, Subpart KK, National Emission Standards for the Printing and Publishing Industry, reporting requirements, which apply to the equipment in this Emission Unit, are summarized below:

Reporting (40 CFR 63.830) - The company shall submit the following reports which are applicable: a notification of performance tests; a notification of compliance status; performance test reports; start-up, shutdown, and malfunction reports; and summary reports. The summary report shall be submitted on a semi-annual basis.

(The requirements which relate to control equipment shall apply if and when the thermal oxidizer is used to achieve compliance with Subpart KK.) (See Comment #2)

c. TAPs (Regulations 5.11 and 5.12)

If there have been process changes which affect the input parameters used in the modeling and which could cause compliance with the Threshold Ambient Limits (TALs) to be invalidated, the owner or operator shall include the following information along with the semi-annual compliance monitoring report:

- i. Emission Unit ID numbers and Emission Point ID numbers of the affected equipment;
- ii. The beginning and ending date of the reporting period;
- iii. A description of the process changes;
- iv. The date that the process changes were made; and

v. A summary of the results of the review which was conducted to demonstrate compliance with the emission standards of this permit.

d. Opacity

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for opacity:

- i. Emission Unit ID number and Stack ID number;
- ii. The beginning and ending date of the reporting period;
- iii. The date, time, and results of each visible emissions survey conducted;
- iv. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none); and
- v. Description of any corrective action taken pursuant to Additional Condition #2.d.iii.

Comments/Explanations

- 1. This laminator is not included in the SIP Revision Application (Federal Register, May 16, 1990 and January 13, 1998, 40 CFR Part 52, Subpart S, 52.920) described in Emission Unit U-2.
- 2. The MACT affected source covered by 40 CFR Part 63, Subpart KK, National Emission Standards for the Printing and Publishing Industry is all of the product and packaging rotogravure and wide-web flexographic printing presses at the facility plus any other equipment at that facility which the owner or operator chooses to include in accordance with 40 CFR 63.821. The compliance requirements are on a facility wide basis (including the equipment in both Emission Unit U-1 and U-2), not on an equipment by equipment basis. At the time that this permit was issued, the company was using the thermal oxidizer to comply with the VOC requirements specified in Regulation 6.29 but was not using the thermal oxidizer to comply with the HAP requirements specified in 40 CFR 63, Subpart KK.
- 3. Prior to using solvent-based adhesives, an evaluation will need to be done to determine if the system for calculating emissions and determining compliance needs to be adjusted.
- 4. Excess emissions referred to in Additional Condition #4.a.iv are to be included in the annual Emission Inventory Report.

Emission Unit U-2 Description: 7 Laminators & 2 Coaters

Emission Unit No.	Emission Unit Description
U-2	Laminators #6, #7, #8, #9, #10, #11, & #14, and Coaters #15 & #16, each equipped with rotogravure printing (or coating) stations and a drying oven. Each laminator also has a glue station. The rotogravure printing stations have the ability to apply water-based and solvent-based inks and coatings.

Applicable Regulations:

Federally Enforceable Regulations		
Regulation	Title	Applicable Sections
40 CFR 52, Subpart S, 52.920	State Implementation Plan Revision - Federal Register, 16 May 1990 and 13 January 1998 All	
40 CFR 63, Subpart KK	National Emission Standards for the Printing and Publishing Industry	See Condition #1.b.
40 CFR 63, Subpart A	General Provisions	See Condition #1.b.
6.09	Standards of Performance for Existing Process Operations	1, 2, 3.1, and 3.3
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 2, 3, 4, and 5

District Only Enforceable Regulations			
Regulation	Title	Applicable Sections	
5.02	Federal Emission Standards for Hazardous Air Pollutants Incorporated by Reference	2.1, 2.31, 3, 4, and 5	
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1, 2, 3, 5, and 6	
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, and 5	

Allowable Emissions:

Emission Pts.	Regulated Air Pollutant	Applicable Regulation	Standard/ Limit
E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-9, &	VOC	40 CFR 52, Subpart S, 52.920	See Additional Condition #1.a.
E-8, E-9, & E-10	HAPs	40 CFR 63, Subpart KK 40 CFR 63, Subpart A	See Additional Condition #1.b.
	TAPs	5.11 & 5.12	See Additional Condition #1.c.
	Opacity	6.09	20% opacity See Additional Condition #1.d.

Components:

Emission Pts.	Process	Primary Fuel	Secondary Fuel
E-2	Laminator #6 with 1 coating station	Natural Gas	None
E-3	Laminator #7 with 1 coating station	Natural Gas	None
E-4	Laminator #8 with 1 coating station	Natural Gas	None
E-5	Laminator #9 with 2 coating stations	Natural Gas	None
E-6	Laminator #10 with 1 coating station	Natural Gas	No. 2 Fuel Oil
E-7	Laminator #11 with 1 coating station	Natural Gas	None
E-8	Laminator #14 with 1 coating station	Natural Gas	None
E-9	Coater #15 with 1 coating station	Natural Gas	No. 2 Fuel Oil
E-10	Coater #16 with 2 coating stations	Natural Gas	None

The following activities associated with Emission Unit No. U-2 are activities that have negligible emissions:

Description	
Electric Batch "Cookers" for coatings	2
Lacquer Mixing Room - 3 Submerged-fill Arms for filling drums with solvent; 1 Mixer; 2 Floor Vents; & 1 Ceiling Hood	1

Note: The activities listed above are also associated with Emission Unit No. U-1.

Control Devices:

There are no control devices on the nine machines. A control efficiency of 50% is achieved on Coater #16 from recirculating the air through the oven. (Note: The air is always recirculated through the oven when Coater #16 is in operation unless there is an equipment malfunction.)

Additional Conditions

1. **Standards** (Regulation 2.16, section 4.1.1)

a. VOC

- i. The owner or operator shall comply with the requirements of the State Implementation Plan Revision application (approved and published in the Federal Register, 16 May 1990 and 13 January 1998, 40 CFR Part 52, Subpart S, 52.920) which was submitted for this equipment. The emission standards are summarized below: (For further details, see the SIP Revision application.) (40 CFR 52, Subpart S, 52.920)
 - 1) The EPA's emission trading policy statement (ETPS), dated December 4, 1986, requires a net emissions reduction of 20% from the lowest of actual, SIP-allowable, or RACT-allowable emissions determined over an established baseline period. The conditions and provisions of the emissions bubble as described in the SIP Revision application shall be the applicable regulation.
 - 2) The nine rotogravure printing/coating machines at the plant (Machine Nos 6, 7, 8, 9, 10 (formerly 13), 11, 14, 15, and 16) shall be treated as one affected facility combined under a bubble for the purpose of determining compliance with the emissions bubble.

The over-control achieved from the use of water-borne coatings/inks (extra low in VOC) can be used for credit during the baseline determination for this bubble. This credit taken for water-borne coatings/inks used during the baseline period cannot be used during post-baseline emission calculations. However, credit can be taken for water-borne or high solids coatings/inks developed and used after the baseline period.

The control achieved from recirculating the air through the oven on Machine #16 can be used when calculating the pounds of VOC after the application of any control measures. A control efficiency of 50% shall be used in the calculations based on the performance testing which was conducted in January of 1991. (If the air is not recirculated through the oven on Coater #16 for any period of time while the coater is in operation, the control efficiency of 50% shall not be used during that time period.)

The plant shall be allowed 365 VOC operating days per year. A VOC operating day shall be defined as a day in which a solvent-borne coating/ink is run on a machine within the bubble or a day in which greater than 100 pounds of VOC are emitted within the bubble from water-borne or high solids coatings/inks as defined in Regulation 6.29, Section 5.

The company shall follow the production scheduling and the record keeping procedures specified in the approved SIP Revision Application (Federal Register, May 16, 1990 and January 13, 1998, 40 CFR Part 52, Subpart S, 52.920).

- The company may use in the bubble 214.0 tons/year of VOC emission reduction credits (267.5 tons/year of VOC emission credits purchased from the Federal Paper Board Company, less a 20 percent reduction). These credits, after subtracting 3.4 tons per year adjustment for makeup solvent usage, shall be equally distributed over the 365 VOC operating production days. (As more accurate data is gathered concerning fugitive emissions, there could be revisions to the 3.4 tons per year value as approved by the District.) A total of 1154 pounds VOC ERC per day are available.
- 4) The company shall use a daily averaging period (three 8-hour shift operation) to demonstrate compliance.
- The nine rotogravure printing/coating machines at the plant shall not emit more than 1458 pounds VOC per day (the adjusted baseline emission limit plus the available emission reduction credits). Also, the nine rotogravure printing/coating machines at the plant shall not emit more than 266.2 tons/year. (This includes VOC emissions from all solvent-borne, water-borne, and high solids coatings/inks on both VOC and non-VOC operating days.
- The nine rotogravure printing/coating machines at the plant shall comply with a daily "RACT-allowable" which is equivalent to: 65% by weight control for solvent-based inks run on the machines within the bubble, usage of 75% water by volume in the volatile portion of water-based coatings/inks, and usage of high solids content coatings/inks with greater than 60% nonvolatile material on a water-free basis.
- ii. The owner or operator shall emit less than 40.689 tons per year of VOC emissions from Laminator #6. (See Comment #1) (Regulation 2.04, section 1.1)
- iii. Although there are no production limits on the laminators, the owner or operator shall obtain the approval of the District prior to modifying or reconstructing the affected facilities. (Regulation 2.03, section 1.1)
- b. **HAPs** (40 CFR Part 63, Subpart KK and Subpart A)

Comply with the requirements of 40 CFR Part 63, Subpart KK, National Emission Standards for the Printing and Publishing Industry. The following sections of Subpart KK are applicable to the equipment in this Emission Unit: §63.820; §63.821 (a)(2)&(3), (b), & (c); §63.822; §63.823; §63.825; §63.826; §63.827 (a), (b)(2), (c)(2)&(3), (d), (e), & (f); §63.828; §63.829; §63.830; §63.831; and Appendix A. Table 1 to Subpart KK specifies those requirements of 40 CFR Part 63, Subpart A, General Provisions which are applicable to Subpart KK facilities. The Subpart KK emission standards, which apply to the equipment in this Emission Unit, are summarized below:

Emission Standards (40 CFR 63.825) - Emissions are limited to no more than five percent of the organic HAP applied for the month; or to no more than four percent of the mass of inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month; or to no more than 20 percent of the mass of solids applied for the month; or to a calculated equivalent allowable mass based on the organic HAP and solids contents of the inks, coatings, varnishes, adhesives, primers, solvents, reducers, thinners, and other materials applied for the month. (The requirements which relate to control equipment shall apply if and when the thermal oxidizer on Laminator #12 (Emission Unit U-1) is used to achieve compliance with Subpart KK.) (See Comment #2)

c. **TAPs** (Regulations 5.11 and 5.12)

- i. The owner or operator shall comply with District Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants and District Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants by maintaining monthly records to demonstrate that the modeling input parameters have not changed such that compliance with the Threshold Ambient Limits (TALs) would be invalidated.
- ii. The owner or operator shall comply with the following source-wide TAP emission limits until additional modeling is performed. After additional modeling, the owner or operator shall comply with those TAP emission limits approved by the District.

Source-wide TAP Emissions Limits			
ТАР	Regulation	Allowable Emissions (lbs/hr)	
Ammonia	5.11/5.12	19.03	
Ethyl acetate	5.12	658.89	
Isobutyl alcohol	5.12	44.74*	
Isopropyl acetate	5.12	403.39	
Methyl propyl ketone	5.12	562.72	
n-Butyl acetate	5.12	305.81*	
n-Propyl acetate	5.12	647.48	
Propyl alcohol	5.12	153.07*	

^{*} After modeling was performed in September 1998, the stacks on Laminators #9 and #14 were re-configured. This will result in larger allowable emission rates for these pollutants. Additional modeling has not yet been performed to quantify these larger allowable emission rates.

- iii. The owner or operator shall continue to comply with Regulations 5.11 and 5.12, except for those specific pollutants governed by a MACT standard that is or becomes applicable to this source.
- iv. The owner or operator shall not be precluded from requesting that Additional Conditions #1.c.i. and #1.c.ii. above, be replaced with another District-approved method of compliance demonstration more suitable to their particular facility and mode of operation.

d. **Opacity**

The owner or operator shall not discharge into the atmosphere from any process operation, or from any air pollution control equipment installed on any process operation, any gases that may contain particulate matter that is equal to or greater than 20 percent opacity. (Regulation 6.09, sections 3.1 and 3.3)

2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

a. VOC

i. The owner or operator shall supply such information, as required by the District, to demonstrate compliance on a daily basis. The company shall continue using the present compliance reporting system, as specified in the approved SIP Revision Application (Federal Register, May 16, 1990 and January 13, 1998, 40 CFR Part 52, Subpart S, 52.920), unless changes to the system are approved or requested by the District. For each rotogravure product produced on a machine within the emissions bubble, accurate records shall be maintained of 1) the date, 2) the machine number, 3) the yards run, 4) the output width, 5) the output laydown rate (pounds of coatings used for specified area), and 6) the coating used. The company shall verify the accuracy of the laydown rates as described in Additional Condition 2.a.ii. The actual measured laydown value from each master roll produced shall be used in determining the actual emissions for each day. (In the limited cases where the amount of solids applied to the base material is too low to allow an accurate measurement, the laydown value shall be determined from empirical data.) The "TABLE VOC" (pounds of VOC per gallons of coating/ink used), "TABLE SLD" (pounds of solids per gallons of coating/ink used), and "TABLE GAL" (gallons of solids per gallons of coating/ink used) shall be determined by using the applicable ASTM or federal methods as specified in Additional Condition 2.a.iii. The "GAL OF COAT" (gallons of coating/ink used), "GAL OF SOLIDS" (gallons of solids applied for the run), "BEFORE LBS VOC" (pounds of VOC prior to application of any control measures: - for water-borne coatings/inks, the value shown is based on a theoretical 25% VOC coating/ink. [Note: The theoretical 25% VOC content of a water-borne coating/ink is calculated by substituting isopropyl alcohol (a representative solvent) for water in the mixture to produce a 25% by volume solvent content on a solids free basis. - for organic solvent-based coatings/inks, the value shown is based on the TABLE VOC x GAL OF COAT), "AFTER LBS VOC" (pounds of VOC after application of any control measures: - for water-borne coatings/inks,

the value shown is the actual pounds of VOCs emitted from the water-borne mixture: -for water-borne coatings/inks run on Machine #16, the value is 50% of the actual pounds of VOCs emitted from the water-borne mixture; for organic solvent coatings/inks run on Machine #16, the value shown is 50% of the BEFORE LBS VOC (i.e. 50% control efficiency); - for organic solvent coatings/inks run on uncontrolled machines, the value shown equals the BEFORE LBS VOC.), "ALLOW LBS VOC" (pounds of VOC allowed to be discharged: - for water-borne coatings/inks, the value shown is the theoretical 25% coating/ink (BEFORE LBS VOC). (Baseline period only) for organic solvent coatings/inks run on Machine #16 or on uncontrolled machines, the value shown equals 35% of the BEFORE LBS VOC value [RACT allowable].), "CREDIT + ALLOW" (a summation of the equivalent credits plus the equivalent allowable values [CREDIT/GAL SLD + ALLOW LBS VOC/GAL SLD]), and other parameters such as makeup solvent usage, shall be calculated as specified in Sections 3 and 4 and Attachment 1 of the SIP Revision Application (Federal Register, May 16, 1990 and January 13, 1998, 40 CFR Part 52, Subpart S, 52.920). Records shall be maintained of the daily emissions (a total of the first, second, and third shifts) from the nine rotogravure printing/coating machines. Compliance reports shall be submitted for each calendar month and are to be submitted to the District within 20 calendar days following the end of each month. (40 CFR 52, Subpart S, 52.920 and Regulation 1.05, Section 4)

ii. The owner or operator shall verify the accuracy of the laydown rates according to Attachment 2 of the SIP Revision Application (Federal Register, May 16, 1990 and January 13, 1998, 40 CFR Part 52, Subpart S, 52.920) or as required by the District. (This may include comparing the computer generated emissions to emissions calculated from actual ink and solvent usages over either short or long term periods.) (40 CFR 52, Subpart S, 52.920 and Regulation 1.05, Section 4)

Attachment 2 is as follows:

REYNOLDS METALS COMPANY LAYDOWN PROCEDURE

1. SCOPE:

- 1.1 Reynolds Metals Company expresses laydown in weight per unit area of product (ream weight). [1 ream = 3000 ft²]
- 1.2 The weight per unit area is expressed as lbs. per ream.

2. APPARATUS:

- 2.1 Balance, readable and accurate to 0.0001 g is essential to obtain accuracy.
- 2.2 Cutter, a template is used for preparing specimen sheets. The sample should be cut to exact size with a sharp knife on a smooth surface to insure accuracy in cutting.

2.3 Scale, such as a finely graduated steel rule reading in 0.5 mm, capable of measuring the dimensions of the specimen to an accuracy of 0.2%.

3. CALIBRATION:

3.1 Be sure that the sheet-weighing device has been properly calibrated to the required accuracy. Before each use, see that appreciable frictional effects are absent and that the zero reading is correct.

4. TEST SPECIMEN:

- 4.1 Obtain the sample to be tested. From each lot of stock to be tested, a representative sheet should be chosen.
- 4.2 Testing is limited to coatings that show weighable difference from coating removal.

5. PROCEDURE:

- 5.1 Cut sample using template and cutting methods to assure that each specimen is within 0.3%, i.e., measure the dimensions of each sheet to within 0.2%. Determine the total weight of each specimen to the fourth decimal place.
- 5.2 Carefully remove the coating using appropriate solvent without tearing foil or scratching and scouring surface (i.e., use light pressure and cotton ball or wash with a squirt bottle). Thoroughly dry sample and inspect to assure coating has been totally removed. Reweigh sample and record weight to the fourth decimal place.

6. CALCULATIONS:

6.1 Subtract cleaned sample weight from original weight. Sizing of template allows direct conversion from decimal grams by multiplying by a factor of 100 (i.e., display shows 0.3542 g, this results in 35.42 lbs. per ream) to arrive at total coating weight.

7. **REPORT:**

7.1 For coatings, express the weight per unit area in lbs. per ream to two significant figures.

8. ADDITIONAL INFORMATION:

- 8.1 Effective Date of Issue: 08/01/88
- 8.2 Template is sized to yield direct conversion from decimal gram scale to lbs. per ream. Template size is 3.0861 square inches.
- iii. The company shall use the following program to periodically certify the accuracy of the coating data for the laminators/coaters in the bubble:

- The VOC, water, and solids content of the coatings shall be determined by using the following test methods: ASTM D1475, ASTM D2369, ASTM D3792, ASTM D4017, or those test methods which are approved by the District and EPA.
- 2) Any new production coating/ink shall be tested prior to usage.
- 3) In the event of a change or modification in the formulation of an existing coating/ink, a test shall be completed and the information shall be submitted to the District within 90 days of this change.
- 4) As a quality assurance program, the following test plan shall be conducted:
 - a) All coatings/inks that represent 10% of the total gallons used in the bubble for the previous calendar year shall be tested quarterly.
 - b) All coatings/inks that represent 5% of the total gallons used in the bubble for the previous calendar year shall be tested semiannually.
 - c) All coatings/inks that represent 1% of the total gallons used in the bubble for the previous calendar year shall be tested annually.
 - d) All coatings/inks that represent greater than 50 gallons of usage but less than 1% of the total gallons used in the bubble for the previous calendar year shall be tested biennially.
- 5) If after testing, the VOC content of a coating/ink is found to vary more than 10% from the manufacturer's stated value, the higher value shall be used until the discrepancy is resolved to the District's satisfaction.
- 6) If it is determined upon reviewing the coating/ink usage for the previous calendar year that a coating/ink is overdue for testing due to being redesignated to a more restrictive schedule, this testing shall be completed by April 1st of the new calendar year.

 (40 CFR 52, Subpart S, 52.920 and Regulation 1.05, Section 4)
- iv. As specified in Regulation 1.04, Performance Tests; Regulation 1.05, Sections 1 and 3; Regulation 6.01, General Provisions, Section 4; and Regulation 6.29, Standard of Performance for Existing Graphic Arts Facilities Using Rotogravure and Flexography, Section 4, the company shall perform any additional compliance testing as required by the District. This testing shall be performed using test methods as approved by the District. As requested by the District, EPA Test Methods 1, 2, 3, 4, 24, 24A, 25, and 25A as specified in the Code of Federal Regulations (CFR) Title 40, Part 60, Appendix A, and Procedures F.1, L, and T as specified in the EPA "Guidelines for Developing Capture Efficiency Protocols" shall be used in order to determine the efficiency of control devices. (40 CFR 52, Subpart S, 52.920 and Regulation 1.05, Sections 1 and 3)

- v. If additional VOC control equipment is installed at the plant, a performance test shall be conducted within 60 days of startup of the new equipment. (40 CFR 52, Subpart S, 52.920)
- The owner or operator shall keep track of the "additional solvent usage" for vi. Machine Nos 6, 7, 8, 9, 10, 11, 14, 15, and 16 to determine if the annual VOC emissions are equal to or less than the value specified in Additional Condition #1.a.i.3. This monitoring program will undergo annual evaluation to determine the impact of the "additional solvent usage" on the total emissions reduction credit allocation. If revisions are made to the 3.4 tons per year value for "additional solvent usage" corresponding changes will need to be made to the daily and annual VOC limits (1458 pounds/day and 266.2) tons/year). If there is more "additional solvent usage", the daily and annual VOC limits must be reduced. Records for "additional solvent usage" will include the date, solvent identification, and quantity used for make up, clean up, incidental spillage, and leakage. Annual records shall also be kept of the identification and quantity of each adhesive used so that appropriate adjustments can be made to the "additional solvent usage" value. The records above shall be kept on forms approved by the District. (40 CFR 52, Subpart S, 52.920)
- vii. The owner or operator shall notify the District prior to using solvent-based adhesives. (See Comment #3)
- viii. The owner or operator shall calculate and record the VOC emissions from Laminator #6 for each calendar day and each calendar month as specified Additional Conditions 2.a.i, ii, iii, & vi above. The 12-month rolling VOC emissions from Laminator #6 shall be calculated and recorded each calendar month. (Compliance with the annual VOC limit shall be demonstrated each month using emission data from the most recent twelve calendar months.) (See Comment #1) (Regulation 2.04, section 1.1)
- b. **HAPs** (40 CFR Part 63, Subpart KK and Subpart A)

The 40 CFR Part 63, Subpart KK, National Emission Standards for the Printing and Publishing Industry, monitoring requirements, which apply to the equipment in this Emission Unit. are summarized below:

- i. Compliance Demonstration (40 CFR 63.825, 63.826, and 63.827) Compliance with the regulation is required on and after May 30, 1999 (beginning with the monthly calculation for June 1999). The company shall demonstrate that the inks, coatings, varnishes, adhesives, primers, solvents, diluents, reducers, thinners, and other materials applied each month are in compliance with the emission standards specified in 40 CFR 63.825.
 - Procedures are specified in the regulation for determining the organic HAP content, the volatile matter content, and the solids content of the materials applied, for conducting performance tests, and for performing calculations to demonstrate compliance with the emission standards.
- ii. <u>Monitoring Requirements (40 CFR 63.828)</u> The regulation has various requirements to ensure that the monitoring equipment is properly operated and maintained. This includes requirements for continuous emission monitors, temperature monitors, and the operating parameters which are

monitored to ensure that the capture efficiency measured during the initial compliance test is maintained.

(The requirements which relate to control equipment shall apply if and when the thermal oxidizer on Laminator #12 (Emission Unit U-1) is used to achieve compliance with Subpart KK.) (See Comment #2)

c. TAPs (Regulations 5.11 and 5.12)

The owner or operator shall demonstrate compliance with Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants and Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants, by complying with Additional Conditions #2.c.i. through #2.c.ii., below. These conditions are surrogates for hourly emissions records and will monitor ongoing compliance.

- i. The owner or operator shall maintain monthly records to demonstrate that the modeling input parameters have not changed such that compliance with the Threshold Ambient Limits (TALs) would be invalidated; and make these records available to the District upon request.
- ii. The owner or operator shall continue to comply with Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants and Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants, except for those specific pollutants governed by a MACT standard that is, or becomes, applicable to this source or pollutant.
- iii. The owner or operator shall not be precluded from requesting that Additional Condition #2.c.i. above, be replaced with another District-approved method of compliance demonstration more suitable to their particular facility and mode of operation.

d. **Opacity**

To demonstrate compliance with the opacity standard, the procedures below shall be followed when fuel oil is burned in Laminator #10 Oven (Stack No. S10) or in Coater #15 Oven (Stack Nos. S13, S14, and S15):

- i. To demonstrate compliance with the opacity standard, the owner or operator shall conduct a daily one-minute visible emissions survey, during normal operation and daylight hours, of Stacks S-10, S13, S14, and S15, as applicable. No more than four Emission Points shall be observed simultaneously.
- ii. For Emission Points without observed visible emissions during fourteen consecutive operating days (when readings are required), the owner or operator may elect to conduct a weekly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.

- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in Additional Condition #2.d.i.
- iv. If Laminator #10 and Coater #15 are not operated or if no. 2 fuel oil is not burned in the emission points during a given day (or week, as appropriate), then no visible emission survey needs to be performed.

3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. VOC

The owner or operator shall keep records, as needed, to comply with the requirements specified in Additional Conditions #2.a. and #4.a. This includes keeping records as follows: for documenting production data for each rotogravure product produced during the day, VOC emissions before control, VOC emissions after control, and allowable VOC emissions; for verifying the accuracy of the laydown rates; for certifying the accuracy of the coating data; for determining makeup and cleanup solvent usage; for documenting adhesive usage; and for determining the monthly and 12-month rolling VOC emissions from Laminator #6.

b. **HAPs** (40 CFR Part 63, Subpart KK and Subpart A)

The 40 CFR Part 63, Subpart KK, National Emission Standards for the Printing and Publishing Industry, record keeping requirements, which apply to the equipment in this Emission Unit. are summarized below:

Record keeping (40 CFR 63.829) - The company shall keep records on a monthly basis of the following: Material usage, HAP usage, volatile matter usage, and solids usage that support data that the source is required to report. The following additional records would be required if a thermal oxidizer or other add-on control equipment was used for achieving compliance: Various startup, shutdown, and malfunction information for process equipment and air pollution control equipment; maintenance performed on the air pollution control equipment; various information on continuous monitoring system (CMS) performance, maintenance, calibration, quality control, malfunctions, and corrective action taken; performance test information; all required measurements needed to demonstrate compliance with the emission standards such as continuous emission monitor data, control device and capture system operating parameter data; liquid-liquid material balances if a solvent recovery device is used; all required CMS measurements; each period of excess emissions and parameter monitoring exceedances; the total process operating time during the reporting period; and other miscellaneous data.

If the company qualifies for various exemptions from the regulation, the records required by the regulation shall be maintained. (The requirements which relate to control equipment shall apply if and when the thermal oxidizer on Laminator #12

(Emission Unit U-1) is used to achieve compliance with Subpart KK.) (See Comment #2)

c. **TAPs** (Regulations 5.11 and 5.12)

See Additional Condition #2.c.

d. **Opacity**

To demonstrate compliance with the opacity standard, the procedures below shall be followed when fuel oil is burned in Laminator #10 Oven (Stack No. S10) or in Coater #15 Oven (Stack Nos. S13, S14, and S15): Records of the results of all visible emission surveys and tests performed shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; and whether visible emissions were observed. If Laminator #10 and Coater #15 is not operated or if no. 2 fuel oil is not burned in the emission points during a given day (or week, as appropriate), then no visible emission survey needs to be performed and a negative declaration may be entered in the record. Records shall be kept of any corrective action taken pursuant to Additional Condition 2.d.iii.

4. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. VOC

- i. The owner or operator shall submit a compliance monitoring report for Laminators #6, #7, #8, #9, #10, #11, & #14, and Coaters #15 & #16 each calendar month. This report shall be submitted to the District within 20 calendar days following the end of each month. The following information, at a minimum, shall be included for determining compliance with Additional Condition #1.a.i:
 - 1) Emission Point ID numbers;
 - 2) The beginning and ending date of the reporting period; and
 - 3) Daily production data, emissions before control, emissions after control, and allowable emissions, as specified in Additional Condition #2.a.i.

(40 CFR 52, Subpart S, 52.920)

- ii. For Laminator #6, the following information, at a minimum, shall be included for determining compliance with the annual VOC limit specified in Additional Condition #1.a.ii:
 - 1) Emission Unit ID number and Emission Point ID number;
 - 2) The beginning and ending date of the reporting period; and
 - A listing of the monthly VOC emissions and a listing of the annual VOC emissions for the previous 12 calendar months.

b. **HAPs** (40 CFR Part 63, Subpart KK and Subpart A)

The 40 CFR Part 63, Subpart KK, National Emission Standards for the Printing and Publishing Industry, reporting requirements, which apply to the equipment in this Emission Unit, are summarized below:

Reporting (40 CFR 63.830) - The company shall submit the following reports which are applicable: a notification of performance tests; a notification of compliance status; performance test reports; start-up, shutdown, and malfunction reports; and summary reports. The summary report shall be submitted on a semi-annual basis.

(The requirements which relate to control equipment shall apply if and when the thermal oxidizer on Laminator #12 (Emission Unit U-1) is used to achieve compliance with Subpart KK.) (See Comment #2)

c. **TAPs** (Regulations 5.11 and 5.12)

If there have been process changes which affect the input parameters used in the modeling and which could cause compliance with the Threshold Ambient Limits (TALs) to be invalidated, the owner or operator shall include the following information along with the semi-annual compliance monitoring report:

- i. Emission Unit ID numbers and Emission Point ID numbers of the affected equipment;
- ii. The beginning and ending date of the reporting period;
- iii. A description of the process changes;
- iv. The date that the process changes were made; and
- v. A summary of the results of the review which was conducted to demonstrate compliance with the emission standards of this permit.

d. Opacity

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for opacity:

- i. Emission Unit ID number and Stack ID number;
- ii. The beginning and ending date of the reporting period;
- iii. The date, time, and results of each visible emissions survey conducted;
- iv. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none); and
- v. Description of any corrective action taken pursuant to Additional Condition #2.d.iii.

Comments/Explanations

1. In 1993, physical changes were made to Laminator #6. The machine speed of Laminator #6 was increased from 420 feet per minute to about 1500 feet per minute. In 1993, the machine speed of Laminator #10 was increased from 400 feet per minute to about 1000 feet per minute, however, no physical changes were made to this machine. Due to permit limitations, Laminators #6 and #10 were allowed by the District to run at the higher speed using only a few specific water-based coatings. The SIP Revision revised in March 1997, and approved by EPA, removed the provisions that specified a maximum operating speed for each machine. After this approval, no additional limits were placed on Laminator #10 since there

had been no physical changes made to this machine. The VOC emissions from Laminator #6 are limited to less than 40.689 tons per year. This condition was imposed to insure that the modification of Laminator #6 will not cause a "significant net emission increase" - a 1991/1992 average emission rate of 0.689 tons per year plus 40 tons per year.

- 2. The MACT affected source is all of the product and packaging rotogravure and wide-web flexographic printing presses at the facility plus any other equipment at that facility which the owner or operator chooses to include in accordance with 40 CFR 63.821. The compliance requirements are on a facility wide basis (including the equipment in both Emission Unit U-1 and U-2), not on an equipment by equipment basis. At the time that this permit was issued, the company was using the thermal oxidizer on Laminator #12 (Emission Unit U-1) to comply with the VOC requirements specified in Regulation 6.29 but was not using the thermal oxidizer to comply with the HAP requirements specified in 40 CFR 63, Subpart KK.
- 3. Prior to using solvent-based adhesives, an evaluation will need to be done to determine if the system for calculating emissions and determining compliance needs to be adjusted.

Emission Unit U-3 Description: 4 Indoor Aboveground Storage Tanks

Emission Unit No. Emission Unit Description	
U-3	4 Indoor Aboveground Storage Tanks, for storing various printing solvents and polyester coatings

Applicable Regulations:

Federally Enforceable Regulations			
Regulation	Title	Applicable Sections	
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	1, 2, 3.3, 4.2, 4.2.1, 7, & 8	

District Only Enforceable Regulations				
Regulation	Title	Applicable Sections		
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, and 5		
5.14	Hazardous Air Pollutants and Source Categories	1, 2, and 3		

Allowable Emissions:

Emission Pts.	Regulated Air Pollutant	Applicable Regulation	Standard/ Limit
E-11, E-12, E-13,	VOC	7.12	See Additional Condition #1.a.
and E-13A	TAPs	5.12	See Additional Condition #1.b.

Components:

Emission Pts.	Process	Material Stored	Storage Tank Capacity	Installation Date
E-11	Tank #1	Printing Solvents	1000 gallons	1988
E-12	Tank #2	Printing Solvents	2000 gallons	1988
E-13	Tank #3	Printing Solvents	1000 gallons	1988
E-13A	Tank #4	Water-based Polyester Coatings	10,000 gallons	1998

Control Devices:

Tanks #1, #2, & #3 are each equipped with a submerged fill pipe. Tank #4 is equipped with a 4 inch conservation vent but does not have a submerged fill pipe.

Additional Conditions

1. **Standards** (Regulation 2.16, section 4.1.1)

a. VOC

The owner or operator shall not use Tank #4 for storing a material if the true vapor pressure of the VOCs, as stored, is equal to or greater than one and one-half (1.5) psia. True vapor pressure "as stored" shall be determined on an instantaneous basis under conditions representing expected worst case conditions. (Regulation 7.12, section 3.3)

b. **TAPs** (Regulation 5.12)

- i. The owner or operator shall comply with District Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants and District Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants by maintaining monthly records to demonstrate that the modeling input parameters have not changed such that compliance with the Threshold Ambient Limits (TALs) would be invalidated.
- ii. The owner or operator shall comply with the following source-wide TAP emission limits until additional modeling is performed. After additional modeling, the owner or operator shall comply with those TAP emission limits approved by the District.

Source-wide TAP Emissions Limits				
ТАР	Regulation	Allowable Emissions (lbs/hr)		
Ammonia	5.11/5.12	19.03		
Ethyl acetate	5.12	658.89		
Isobutyl alcohol	5.12	44.74*		
Isopropyl acetate	5.12	403.39		
Methyl propyl ketone	5.12	562.72		
n-Butyl acetate	5.12	305.81*		
n-Propyl acetate	5.12	647.48		
Propyl alcohol	5.12	153.07*		

^{*} After modeling was performed in September 1998, the stacks on Laminators #9 and #14 were re-configured. This will result in larger allowable emission rates for these pollutants. Additional modeling has not yet been performed to quantify these larger allowable emission rates.

- iii. The owner or operator shall continue to comply with Regulations 5.11 and 5.12, except for those specific pollutants governed by a MACT standard that is or becomes applicable to this source.
- iv. The owner or operator shall not be precluded from requesting that Additional Conditions #1.b.i. and #1.b.ii. above be replaced with another District-approved method of compliance demonstration more suitable to their particular facility and mode of operation.

2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

a. VOC

The owner or operator shall keep records of the materials stored in Tank #4 to demonstrate that the true vapor pressure mentioned in Additional Condition #1.a is not exceeded. (There are no monitoring requirements for Tanks #1, #2, and #3.) (Regulation 7.12, section 3.3)

b. **TAPs** (Regulation 5.12)

The owner or operator shall demonstrate compliance with Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants and Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants, by complying with Additional Conditions #2.b.i. through #2.b.ii., below. These conditions are surrogates for hourly emissions records and will monitor ongoing compliance.

- i. The owner or operator shall maintain monthly records to demonstrate that the modeling input parameters have not changed such that compliance with the Threshold Ambient Limits (TALs) would be invalidated; and make these records available to the District upon request.
- ii. The owner or operator shall continue to comply with Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants and Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants, except for those specific pollutants governed by a MACT standard that is, or becomes, applicable to this source or pollutant.
- iii. The owner or operator shall not be precluded from requesting that Additional Condition #2.b.i. be replaced with another District-approved method of compliance demonstration more suitable to their particular facility and mode of operation.

3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. **VOC**

i. The owner or operator shall keep records of the materials stored in Tank #4 to demonstrate that the true vapor pressure mentioned in Additional Condition #1.a is not exceeded. (Regulation 7.12, section 3.3)

- ii. The owner or operator shall keep records for the four storage tanks, as needed, to report the emissions of the source to the District. (Regulation 1.06, Section 3)
- b. **TAPs** (Regulation 5.12)

See Additional Condition #2.b.

- 4. **Reporting** (Regulation 2.16, section 4.1.9.3)
 - a. VOC

The owner or operator shall promptly report if any materials are stored in Tank #4 which exceed the vapor pressure limits specified in Additional Condition #1.a. (Regulation 7.12, section 3.3)

b. **TAPs** (Regulation 5.12)

If there have been process changes which affect the input parameters used in the modeling and which could cause compliance with the Threshold Ambient Limits (TALs) to be invalidated, the owner or operator shall include the following information along with the semi-annual compliance monitoring report:

- i. Emission Unit ID numbers and Emission Point ID numbers of the affected equipment;
- ii. The beginning and ending date of the reporting period;
- iii. A description of the process changes;
- iv. The date that the process changes were made; and
- v. A summary of the results of the review which was conducted to demonstrate compliance with the emission standards of this permit.

Comments/Explanations

The storage tanks are subject to Regulation 7.12 which requires a submerged fill pipe if the true vapor pressure of the VOCs, as stored, is equal to or greater than one and one-half (1.5) psia. The storage tanks do not have an allowable VOC emission limit. Due to their small size, the tanks are not subject to 40 CFR Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.

Emission Unit U-4 Description: 2 Heating Boilers

Emission Unit No.	Emission Unit Description	
U-4	2 Heating Boilers, 16.737 MMBTU/hr input each. Primary Fuel: Natural Gas. Secondary Fuel: No. 2 Fuel Oil.	

Applicable Regulations:

Federally Enforceable Regulations			
Regulation Title Applicable Section			
6.07	Standards of Performance for Existing Indirect Heat Exchangers	1, 2, 3, 4.1, & 4.3	

Allowable Emissions:

Emission Pt.	Regulated Air Pollutant	Applicable Regulation	Standard/ Limit
E-14 and E-15	PM	6.07	See Additional Condition #1.a.
	SO_2	6.07	See Additional Condition #1.b.
	Opacity	6.07	See Additional Condition #1.c.

Components:

Emission Pts.	Stack ID	Boiler	Allowable lbs PM/MMBTU	Allowable lbs SO ₂ /MMBTU
E-14	S-18	West Boiler	0.4213	1.0
E-15	S-19	East Boiler	0.4213	1.0

Control Devices:

There are no control devices on the two boilers.

Additional Conditions

1. Standards (Regulation 2.16, section 4.1.1)

a. **PM**

The owner or operator shall not allow the emission into the atmosphere from either boiler any gases which contain particulate matter in excess of 0.4213 lbs PM/MMBTU. (Regulation 6.07, sections 3.1)

b. **Opacity**

The owner or operator shall not allow the emission into the open air of particulate matter from either boiler which is greater than 20 percent opacity, except as exempted in Regulation 6.07, section 3.3. (Regulation 6.07, sections 3.2 and 3.3)

c. SO_2

The owner or operator shall not allow the emission into the atmosphere from either boiler any gases which contain sulfur dioxide in excess of 1.0 lbs SO₂/MMBTU. (Regulation 6.07, Section 4)

2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

a. **PM**

See Additional Condition #3.c.

b. **Opacity**

To demonstrate compliance with the opacity standard, the procedures below shall be followed when fuel oil is burned in either boiler (Stack Nos. S-18 and S-19):

- i. To demonstrate compliance with the opacity standard, the owner or operator shall conduct a daily one-minute visible emissions survey, during normal operation and daylight hours, of Stacks S-18 and S-19, as applicable. No more than four Emission Points shall be observed simultaneously.
- ii. For Emission Points without observed visible emissions during fourteen consecutive operating days (when readings are required), the owner or operator may elect to conduct a weekly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial

observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in Additional Condition #2.b.i..

iv. If the boilers are not operated or if no. 2 fuel oil is not burned in the boilers during a given day (or week, as appropriate), then no visible emissions survey needs to be performed.

c. SO_2

See Additional Condition #3.c.

- 3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)
 - a. PM

See Additional Condition #3.c.

b. **Opacity**

To demonstrate compliance with the opacity standard, the procedures below shall be followed when fuel oil is burned in either boiler (Stack Nos. S-18 and S-19): Records of the results of all visible emission surveys and tests performed shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; and whether visible emissions were observed. If the boilers are not operated or if no. 2 fuel oil is not burned in the boilers during a given day (or week, as appropriate), then no visible emission survey needs to be performed and a negative declaration may be entered in the record. Records shall be kept of any corrective action taken pursuant to Additional Condition 2.b.iii.

c. SO_2

- i. The owner or operator shall keep daily records of type of fuel combusted.
- ii. The owner or operator shall keep records of the monthly fuel oil usage for the boilers and purchase records that show the heating value and the sulfur content for the fuel oil. The above records shall be available upon request by the District. The company shall obtain approval prior to making any changes in the type of fuel burned.
- 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. PM

See Additional Condition #2.c.

b. **Opacity**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for opacity:

- i. Emission Unit ID number and Stack ID number:
- ii. The beginning and ending date of the reporting period;
- iii. The date, time, and results of each visible emissions survey conducted;
- iv. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none); and
- v. Description of any corrective action taken pursuant to Additional Condition #2.b.iii.

$c. SO_2$

See Additional Condition #3.c.

Comment/Explanation

The PM emission standards cannot be exceeded when burning natural gas or no. 2 fuel oil, based on AP-42 (5th Edition Supplement, dated 9/98) emission factors . The SO_2 emission standards cannot be exceeded when burning natural gas or no. 2 fuel oil, based on AP-42 emission factors, if the sulfur content of the oil is kept below 0.97% for an oil having a heat content of 138,000 BTU/gallon or more.

Emission Unit U-5 Description: 1 Cold Solvent Parts Cleaner with a secondary reservoir

Applicable Regulations:

Federally Enforceable Regulations				
Regulation	Title	Applicable Sections		
7.18	Standards of Performance for New Solvent Metal Cleaning Equipment	1, 2, 3, 4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.2, 4.3, and 4.4		

District Only Enforceable Regulations			
Regulation	Applicable Sections		
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, and 5	
5.14	Hazardous Air Pollutants and Source Categories	1 and 2	

Allowable Emissions:

Emission Pt.	Regulated Air Pollutant	Applicable Regulation	Standard/ Limit
E-16	VOC	7.18	See Additional Condition # 1.a
	TAPs	5.12	See Additional Condition # 1.b

Components:

Emission Pt. No.	Process	Capacity	Date Installed
E-16	1 Parts Cleaner (Non-halogenated Cold Solvent) with a secondary reservoir	27 gallons	1993

Control Devices: There are no control devices associated with this emission unit.

Additional Conditions

- 1. **Standards** (Regulation 2.16, section 4.1.1)
 - a. **VOC** (Regulation 7.18, Sections 3 and 4)
 - i. Control Equipment
 - 1) The cleaner shall be equipped with a cover.
 - 2) The cleaner shall be equipped with a drainage facility such that VOC that drains off parts removed from the cleaner will return to the cleaner.
 - 3) A permanent, conspicuous label summarizing the operating requirements specified in Additional Condition #1.a.ii shall be installed on or near the cleaner.
 - 4) If used, the VOC spray shall be a fluid stream (not a fine, atomized, or shower type spray) at a pressure that does not cause excessive splashing.
 - ii. Operating Requirements
 - 1) The owner or operator shall not dispose of waste VOC or transfer it to another party in a manner that more than 20% by weight of the waste VOC can evaporate into the atmosphere. The owner or operator shall store waste VOC only in covered containers.
 - 2) The owner or operator shall close the degreaser cover whenever not handling a part in the cleaner.
 - 3) The owner or operator shall drain cleaned parts until dripping ceases (15 seconds is usually necessary).

iii. Material Requirements

The owner or operator shall not operate a cold cleaning degreaser with a solvent vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F).

b. **TAPs** (Regulation 5.12)

i. The owner or operator shall comply with District Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants and District Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants by maintaining monthly records to demonstrate that the modeling input parameters have not changed such that compliance with the Threshold Ambient Limits (TALs) would be invalidated.

- ii. The owner or operator shall continue to comply with Regulations 5.11 and 5.12, except for those specific pollutants governed by a MACT standard that is or becomes applicable to this source.
- iii. The owner or operator shall not be precluded from requesting that Additional Condition #1.b.i. above be replaced with another District-approved method of compliance demonstration more suitable to their particular facility and mode of operation.

2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

a. **VOC**

The owner or operator shall conduct monthly inspections to verify ongoing compliance with the control and operational requirements specified in Additional Conditions #1.a.i. and #1.a.ii.

b. **TAPs** (Regulation 5.12)

See Additional Condition #3.b.

3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. VOC

- i. The owner or operator shall maintain records that include the following for each purchase:
 - 1) The name and address of the solvent supplier;
 - 2) The date of the purchase;
 - 3) The type of the solvent; and
 - 4) The vapor pressure of the solvent measured in mm Hg at 20°C (68°F).

(Regulation 7.18, section 4.4.2)

- ii. The owner or operator shall maintain records of the results of the inspections required by Additional Condition #2.a.
- iii. All records shall be retained for 5 years and shall be made available to the District upon request.

b. **TAPs** (Regulation 5.12)

The owner or operator shall maintain monthly records of the quantity of each solvent used including the weight % of each TAP.

4. **Reporting** (Regulation 2.16, section 4.1.9.3)

a. **VOC**

There are no requirements to submit semi-annual compliance monitoring reports for this emission unit. However, General Condition 14, of this permit applies to this emission unit.

b. **TAPs** (Regulation 5.12)

If there have been process changes which affect the input parameters used in the modeling and which could cause compliance with the Threshold Ambient Limits (TALs) to be invalidated, the owner or operator shall include the following information along with the semi-annual compliance monitoring report:

- i. Emission Unit ID numbers and Emission Point ID numbers of the affected equipment;
- ii. The beginning and ending date of the reporting period;
- iii. A description of the process changes;
- iv. The date that the process changes were made; and
- v. A summary of the results of the review which was conducted to demonstrate compliance with the emission standards of this permit.

Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

Alternative Operating Scenarios

The owner or operator did not request to operate under any alternative operating scenarios in its Title V permit application.

Off-Permit Documents

<u>Document</u>	<u>Date</u>
SIP Revision, approved and published in the Federal	16 May 1990 and
Register, 40 CFR Part 52, Subpart S, 52.920	13 January 1998
Rule Effectiveness Plan Rule Effectiveness Improvement Measures	30 January 1995 27 April 1995
Rule Effectiveness improvement wieasures	27 April 1993

Source-Wide HAP Speciation				
НАР	CAS No.	НАР	CAS No.	
Hexane	110-54-3	Toluene	108-88-3	
Methanol	67-56-1	Triethylamine	121-44-8	
Methyl ethyl ketone (MEK)	78-93-3	Xylene	1330-20-7	
Methyl isobutyl ketone (MIBK)	108-10-1			

Note: HAPs cited in the table above are those primarily used at this plant and those identified in the permit application dated 21 April 1997. Emissions of HAPs will vary depending on the product mix.

Insignificant Activities			
Description	Quantity	Basis	
VOC Storage Tanks, 250 gallons or less, for water-based and solvent-based coatings	Various	Exempt, Regulation 2.02, section 2.3.24	
Storage Tanks, fuel or lubricating oils with V.P. < 10 mm Hg at 20 degrees C	Various	Exempt, Regulation 2.02, section 2.3.9.2	
Storage Tank, 8000 gallons, no. 2 fuel oil, not for sale, resale or distribution, annual turnover < 2 x capacity	1	Exempt, Regulation 2.02, section 2.3.25	

Insignificant Activities			
Description	Quantity	Basis	
Combustion Sources < 10 MMBTU/hr - natural gas with some no. 2 fuel oil backup	11	Exempt, Regulation 2.02, section 2.1.1	
Research & Development Activities - R & D Lab	2	Exempt, Regulation 2.02, section 2.3.27	
Internal Combustion Engines	Various	Exempt, Regulation 2.02, section 2.2	
Brazing, Soldering, or Welding Operation	1	Exempt, Regulation 2.02, section 2.3.4	
Emergency Relief Vents or Ventilating Systems (Not otherwise regulated)	Various	Exempt, Regulation 2.02, section 2.3.10	
Lab Ventilating & Exhausting Systems Non Radioactive Materials	Various	Exempt, Regulation 2.02, section 2.3.11	
Indoor PM Collectors, Non 5.11, 5.12, or 5.14 Regulated Material	Various	Exempt, Regulation 2.02, section 2.3.21	
Process Scrap Conveying System, consisting of 1 cyclone, 1 baler, 1 vacuum pickup system and ductwork for conveying scrap laminated stock from Slitters #9, #12, #14, #18 & #20	1	See Note #1	
Process Scrap Conveying System, consisting of 1 cyclone, 1 baler and ductwork for conveying scrap laminated stock from Slitters #17, #19, #21, #22, #23, & #24	1	See Note #1	
Process Scrap Conveying System, consisting of 1 collection bin and ductwork for conveying aluminum trim from Slitter #16, vents indoors	1	Negligible emissions	
Glue Room - 1 Glue Storage Tank, approx. 8000 gals.; 3 Glue Mixing Tanks, approx. 500 gals. each; & 3 Cleanup Troughs	1	Negligible emissions See Note #2.	
Portable Tote Tanks, for raw material shipment of solvent-based coatings. Tanks hold approximately 335 gallons each.	Various	Negligible emissions See Note #3	
Portable Vacuum Pickups (vacuum cleaner like), vent indoors	Various	Negligible emissions	
Sandblast Booth for repair and maintenance activities, vents indoors	1	Negligible emissions	
Caustic Cleaner for cleaning rotogravure rolls, vibrating cleaning	1	Negligible emissions	
Cooling Towers	2	See Note #4.	

^{1.} This is process equipment. The potential PM emissions from the two scrap conveying systems are less than 1 ton per year.

- 2. The company uses water-based glues. Some of the glues that are used have no VOCs and most have less than 0.30 percent VOC by weight. Depending on the glue stored, the Glue Storage Tank could be subject to Regulation 6.13, Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds, but there would be no emission standards or operating requirements that would apply. The glue currently stored in this tank has 0.00% VOC by weight.
- 3. The District regulations relating to storage tanks do not apply to this type of operation.
- 4. Chromium-based water treatment chemicals are not used; therefore 40 CFR Part 63, Subpart Q, National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers does not apply.
- 5. Insignificant Activities are only those activities or processes falling into the general categories defined in Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Equipment associated with a specific operation or process (Emission Unit) shall be listed with the specific process even though there may be no applicable requirements. Information contained in the permit and permit summary shall clearly indicate that those items identified with negligible emissions have no applicable requirements.
- 6. Activities identified in Regulation 2.02, Section 2, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source and must be included in the Title V permit.
 - a. No facility, having been designated as an insignificant activity, shall be exempt from any generally applicable requirement which shall include a 20% opacity limit for facilities not otherwise regulated.
 - b. No periodic monitoring shall be required for facilities designated as insignificant activities.